R E P O R T R E S U M E S

ED 011 584 24

DATA GATHERING IN THE FIRST GRADE PROJECT, PROJECT LITERACY.

BY- BIEMILLER, ANDREW

REPORT NUMBER BR-5-0537-3 PUB DATE 66
CONTRACT OEC-6-10-028
EDRS PRICE MF-$0.09 HC-$1.96 49P.

DESCRIPTORS- *EVALUATION TECHNIQUES, *OBSERVATION, DATA SHEETS, *CURRICULUM EVALUATION, GRADE 1, READING PROGRAMS, WRITING, *LITERACY, *READING INSTRUCTION, READING RESEARCH, PROJECT LITERACY

METHODS TO BE USED FOR EVALUATING A NEW FIRST-GRADE CURRICULUM IN READING AND WRITING WERE PRESENTED. THE CURRICULUM WAS DEVELOPED AS PART OF "PROJECT LITERACY," A COMPREHENSIVE RESEARCH PROGRAM IN AREAS OF EDUCATION RELEVANT TO THE ACQUISITION OF LITERACY SKILLS. INTERRELATED TOPICS OF THE CURRICULUM INCLUDED READING (BOOKS, MAGAZINES, AND GENERAL WRITTEN MATERIAL), BASIC SENTENCE CONSTRUCTION, CODING GAMES, AUDIOVISUAL DISCRIMINATION, ALPHABET LEARNING, CORRESPONDENCES, AND HANDWRITING. FORMS AND SCHEDULES WERE DESIGNED FOR USE IN REPORTING THE OBSERVATIONS AND ASSESSMENTS THAT WERE TO BE MADE TO GATHER DATA RELEVANT TO TWO PROBLEMS--(1) THE RELEVANCY AND EFFECTIVENESS OF THE VARIOUS CURRICULUM TOPICS FOR LEARNING TO READ, AND (2) THE EFFECTIVENESS OF THE PARTICULAR PROCEDURES AND MATERIALS EMPLOYED FOR TEACHING THE CURRICULUM TOPICS. THE "OBSERVATION" FORMS WERE DESCRIBED UNDER THREE BROAD CATEGORIES--THOSE CONCERNED WITH ATTENTION, THOSE CONCERNED WITH TEACHER-CHILD INTERACTION AND CHILD PERFORMANCE, AND THOSE CONCERNED WITH A GENERAL DESCRIPTION OF THE CLASSROOM ACTIVITIES. THE "ASSESSMENT" FORMS WERE DESIGNED FOR EVALUATION OF CLASSROOM WORKSHEETS, BRIEF CLASSROOM CHECKS ON INDIVIDUALS, TESTING OF GROUPS, AND TESTING OF INDIVIDUALS. (JH)

AA000018

BR-5-0537-3
OEC-6-10-028
P.A.-24

Data Gathering in the First Grade Project,

Project Literacy

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education
This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated do not necessarily represent official Office of Education position or policy.

Andrew Biemiller

August 19, 1966

ED011584

Table of Contents

	Preface	
one	Introduction	page 2
two	Questions to be Answered	page 55
three	Observations	page 8
four	Assessment	page 17
five	Records	page 23

Sample Forms

#1	Attention or Interaction, Five or Fewer Children
#2	Whole Class Attention
#3	Performance - Whole Class
#4	Ecological Survey

A	Curriculum Survey
B	Observer's Schedule
C	Weekly Child Summary

Preface

This report suggests a number of fairly detailed and specific procedures and problems. However, please do not feel that these are the be-all and the end-all of our program. On the one hand, the observers and I would appreciate suggestions concerning additions, deletions, changes in method; and the like. On the other hand, we shall probably begin modifying our procedures and adding questions ourselves, starting on "day one."

Introduction

Certain basic assumptions about methods and about the basic organization of the phenomena to be studied need to be made clear.

First of all, as I drew up the observation and assessment forms and schedules, I had in mind the following structure of our curriculum:

Figure 1

Topics	Learning Settings	Materials	Child Performance
Reading	whole class instruction	books	Attention span for situation	various measures of reading and writing performance.
Teacher-composed sentences	teacher and group all child group	worksheets (includes material for typewriter)	Ability to work in group
Coding Alphabet Correspondences Handwriting (mathematics).	independent or semi-independent work: a. worksheets b. typewriter c. taperecorder d. discrimination training devices e. etc.	sentences stories on tape	Ability to work independently. Learning capacity Perceptual problems Distractibility.

Clearly, learning about each of our main topics can take place in each kind of setting. And in each setting, a number of different materials may be appropriate. Individual children may react differently to topics, settings, and materials. Thus topics are mediated through settings, material, and the child's capacities and motivation to the child's performance.

The main topics suggested in Figure 1 were drawn directly from the final notes of this summer's conference. Obviously, as the year progresses we would hope that these topics will integrate into two main topics: reading and composition. The development of this integration will be one of our chief targets for study. At the same time, we will doubtless add topics -- silent reading, more on composition, and the like.

There was much discussion this summer about classroom organization. We shall try to examine instruction and learning in the various settings outlined here to gain insight into their best use. Doubtless there are other kinds of settings or significant differentiations of settings not mentioned here.

Materials, as used here, mean both the immediate content children are working with, (particular correspondences, pages in a book, etc.) and the physical form of the content (worksheet, feltboard and words, etc.)

Ultimately, the individual child makes or breaks our curriculum. We need to diagnose his difficulties and successes with various materials and in various settings. We hope to develop some predictive devices and procedures, as well as materials for detecting weaknesses to be used throughout the year. With our observations we hope to be able to answer the questions: was he trying?, and did he know what to do? when we find evidence of failure or lack of learning.

It is my conviction, on the basis of our two year's experience, that actual performance -- the acquisition of skills -- cannot be very accurately studied by observation of the child performing in a teacher-led group. The three primary reasons for my belief are: (1) each child usually performs on a different piece of material, (2) performances may be influenced by corrections given to others; and (3) both last year's study (First Grade Report, Part II) and RMW's work indicate that there are major differences between performance in a classroom group and individual performance not in a group. Since in the long run we are interested in the child's independent performance, this would seem to be the best criterion.

This is not to say that we will not observe reading groups. We will. But for the most part, our focus of observation will be either the behavior of all the children in the reading group, or the method of instruction used by the teacher (praise, form of corrections, etc.) and children's response to instruction.

This brings up the final introductory point. In reviewing the last two year's work and examining other classroom studies, I find myself constantly thinking about the "economics of data gathering" -- the relative time invested in observing one or another aspect of the classroom, the time spent analyzing these data, and the relative usefulness of the products. I reach the following conclusions:

1. The point mentioned above -- that performance cannot be measured very well in the classroom.

2. That "running records" provide relatively little information compared to the time necessary to gather and analyze them, (We will, initially, use running records to describe teacher-child interaction. I hope later to

use a coded system.)

3. That samples of all relevant phenomena and all children's work are more useful than continuous records of one aspect of the curriculum.

4. That considerable effort should be made to systematically cover all aspects of the program, observing both attention and performance. It is all to easy to miss parts of the curriculum, either in the teaching program or in the observation program. Systematic scheduling and charting of results should help avoid this.

Questions to be Answered

There are really two main questions to be answered this year. They are:

1. How relevant and effective are the various topics for learning to read?

2. How effective are our particular teaching procedures and materials for learning topics (e.g., coding, correspondences, etc.)?

It is unfortunately true, that at best we cannot answer the first question with much certainty. Only a large number of controlled classrooms could provide clear answers to questions about the relevance of particular topics.[1/] We can, however, note whether progress and attainment in topic areas appear to be accompanied by progress in general reading and vice versa.

Our data should be somewhat more precise concerning specific lessons and materials. We should be able to determine from our observations and

---

1/ Even then, the other sources of variability in classroom conditions render results dubious.

performance records how well particular lessons hold the children's interest, whether lessons are overly difficult or easy, and whether children are in fact learning what we expect them to learn.

In addition to these two basic questions, we want to focus on the effectiveness of certain pre-reading and during-year assessments of individual strengths and weaknesses. Some of these assessments will be carried out with special tests, others in the course of regular classroom activities. We plan initial assessments of incoming reading and language skills, short term learning ability, perceptual processing of word-like stimuli. During the year we shall be concerned with optimal motivating conditions (grouping, difficulty of tasks, etc.), development of ability to operate independently, and diagnosis of individual difficulties.

Finally, we plan to obtain some descriptive data on the room in general on "typical" days every six weeks or so.

In order to answer most of the questions outlined above, we shall be repeatedly asking the same, specific, operational questions in all the settings that occur. These questions are:

1. Given a child working with material in a setting: How did he get there? (Later in the year we anticipate varying degrees of choice on the child's part.)

2. Is he attending to the task?

   a. If so, how long has he done so?

   b. If attending, is he following instructions, using materials appropriately, etc.

   c. If not attending, what is he doing?

3. How is his performance? (As noted before, we propose to pick this up from worksheets and tests. We will also sometimes pick up performance in groups.)

a. If performance poor, was he attending?

b. If attending, was he following instructions?

4. When he leaves setting, why?

Observations

We shall be using several types of observation systems. These vary along three continua: the number of people being observed, the number of different questions being asked about these people, and the frequency of observations required.

The observation forms may be divided into three rough categories: those concerned with attention, those concerned with teacher-child interaction and child performance, and those concerned with a general description of the classroom. The attention and interaction forms are further subdivided according to whether five or fewer children are being observed or the whole class.[1/]

In the long run, I hope to develop most of our observations into the "on-the-spot coding" type, which certainly make processing easy, and which probably will make it possible for us to gather the maximum amount of information on issues which concern us most. Initially, however, we would probably do best to enter more complete records of observations, and develop codes (or an agreed-upon shorthand) over the first month.

It will be necessary to have rough schedules of classroom activity in advance of each day. This does not mean that the teachers cannot deviate from such a schedule. The teachers should do whatever they think best on the spot. However, observations should generally not be carried on for more than one half hour continuously. Furthermore, at the end of a period of observation it would be well for the observer to have a few minutes to jot down general comments, check the observation sheets and the like, as well as a short

---

1/ There is an obvious gap here. If seven or eight children are involved, the observer might just watch five. If all of a group larger than five (pending experience) must be watched, the "whole class" form is probably better.

rest. Therefore, we would like to try to avoid putting two lessons which we wish to observe next to each other. Since we wish to observe most lessons, this means deciding not to observe certain lessons on one day and different lessons on another. This decision as to which lessons to observe on a given day will depend on the teacher's schedule for that day. Then, if the schedule must be changed in some part, we will just adjust.[2]

The remainder of this chapter is devoted to descriptions and samples of observation forms proposed for use.

Form 1. Five or fewer children. The actual form may be used both for recording attention and for recording teacher-child interaction. However, the settings and materials for which the form is appropriate differ somewhat when used for attention as opposed to when used for interaction. And the main content of the entries obviously differs a great deal.

A. Tasks --Topics, settings, and materials. At the top of the form are spaces to make five entries on topics, settings and materials. Several things should be said about these. First, it should be mentioned that certain tasks may provide instruction directly relevant to more than one topic. (e.g., alphabet and handwriting) This should be noted. Secondly, there may be situations in which the children to be observed are not all doing the same thing.[1] Each task should be described in the space provided. Tasks are numbered. Under each child, note number of task being carried out, and, of course, shifts from one task to another.

Until we have some experience, I anticipate gathering data on use of the typewriter, tape-recorder set-up, and other gadgetry under this small-group observation condition. Thus the observer might be simultaneously

---

[1] We may find observation under such conditions impractical. We shall see.

[2] See Observer's schedule (Form B) on page 23

keeping track of one child on the typewriter and four on the recorder.

Specific instructions for describing tasks:

1. List one or more topics as given in the outline in the introduction:

   reading - (books, magazines, written material in general)

   sentences - teacher and child composed

   coding unit

   audio-visual discrimination

   alphabet

   correspondences

   writing

2. Settings:

   teacher instructs group (e.g., explains worksheet, use of correspondence, etc.)

   teacher provides feedback to performances (e.g., typical reading group)

   children work together in group (e.g., children making sentences at feltboard)

   children working independently (e.g., doing worksheet, typewriter, etc.)

   children working independently - teach. assistance available (don't know whether we need this one, may always be the case

3. Materials:

   Initially, at least, we will describe materials in detail, giving worksheet numbers, pages in books, sentences, (either in full or by number?) etc. Equipment should also be noted - typewriter, recorder, blackboard, etc.

The space for "why in setting" reflects the fact that sometimes children will have some choice over what they do. Probable entries include: teacher's orders, child's choice (might note alternatives), child invited by other child (still note alternatives), and don't know.

Similarly, within a setting, the child may have a choice of materials. If so, his choice and shifts should be noted.

Form 1 - Attention: Observations for this form will be made by scanning the entire group of children under consideration for one minute, then spending the next minute making entries for each of the five children. We may find it necessary to expand the time for this observation. If the procedure is impractical we will change to a rotational sampling system, looking at each child for about thirty seconds. I strongly suspect, however, that the scanning system will work.

In my view, precise timing is crucial. We need to know when children lose interest or misunderstand the task. We need to know if certain children do so sooner than others. This information will be correlated with performance and assessment measures. It is crucial to the kinds of questions we have been raising about classroom organization.

The particular questions we are raising about attention involve making two decisions about each child. First, is he attending to the task at all? Another way of putting this is, is he trying? Secondly, if he is trying is he doing what he should be doing? (e.g., looking at a book - correct page) or not - (e.g., wrong page, or drawing pictures on a worksheet, etc.) As the use of assistance is an important part of the development of the ability to operate independently, assistance must be observed. If the child is "trying", he may not be asking for needed assistance. This should be noted, as should giving or getting needed assistance.

If the child is not attending to the situation at all, what is he doing? (looking out the window, talking to a friend, etc.) Eventually, we should reduce the number of responses to a small number of codes. At present

we will just enter brief notes answering the questions.

When a child leaves the setting altogether, this should be noted, along with where he went. (Later, of course, we should see whether he completed his work.) If all children leave at once because the teacher called them or schedule requirements (recess, etc.), this too should be noted.

When all children being observed have left the setting, the observer should briefly review the notes she has just taken, make corrections or clarifications if necessary; and put down any further comments she may have.

If the children have produced anything providing a record of performance, this should be looked at, either immediately or sometime during the day. (Thus, it will be necessary for the observer to know whether the teacher plans to send the worksheet home with the children.) A performance summary by child should be appended to the observations.

Before carrying out more observations, the observer should get a ten or fifteen minute break, or do something of a non-observation nature. (e.g., help with typewriter, go over worksheets, etc.)

Form 1 - Teacher-child Interaction: To observe teacher-child interaction in small groups we will use the same form, but in a considerably different manner. The basic unit of observation will be interactions between the teacher and a particular child. Thus the observer may wind up recording quite a number of interactions for one child but very few for another.

An interaction in an instructional situation, as I see it, generally consists of a question or request for a production, followed by an answer or production. This is either acceptable or not. The teacher indicates correct or not to the child.

A second type of interaction is a question from the child to the

teacher, or request for assistance. The teacher may provide an answer or assistance directly, or may provide a hint. The child then performs as in the first case.

Specific instructions for recording teacher-child interaction:

1. How was interaction started?
   a. Teacher directs question to child.
   b. Teacher directs question to anyone in group.
   c. Child asks question.
   d. Child asks question when teacher invites question.
   e. Other.

2. Write out question. (may summarize and/or use "shorthand")

3. Write out answers.

4. (If relevant) Briefly describe teacher feedback: is correctness or incorrectness clear?

5. (If relevant) Briefly describe child's reaction to teacher's feedback: does child seem happy or unhappy?

There is probably too much here to be done. After our first two or three experiences with this system of observation, we will try to simplify it.

Form 2. Whole Class Attention: Obviously, whole-class observations differ from group (or individual) observations in that we are able to get less informaton on more children.[1/] I feel that it is very important that we learn whether all children in the class are capable of attending to the

---

1/ We could, of course, elect to observe a limited number of children in greater detail during whole-class activities. In my opinion, this would not be worthwhile at the beginning of the school year.

FORM #2 .. WHOLE CLASS ATTENTION page _____

Date _____ Obs. _____ Class _____ Time in _____ Time out _____

Topics _____

Materials _____

Child	0-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-19	19-20

Teacher	Size	

FORM #4 ECOLOGICAL SURVEY page _____

Class _____ Observer _____ Date _____ Time in _____ Time out _____

Time	Tasks			

teacher during whole class instruction, and how long they can do so. We may find that whole-class instruction is of little or no profit for half the class in the first weeks of school, indicating the urgency of early acquisition of skills for independent work in the classroom.

At any rate, if we are to answer the basic questions:is each child attending? and how long does he attend? we need the maximum possible number of observations on each child over time. This means that the decisions to be made on each individual observation must be as easy as possible -- probably no more than attending or not attending.

Specific Instructions for Form 2.

Tasks - same as Form 1.

Attention - The general procedure will be to look at each child, making a check or some if he is attending and an 0, if he is distracted by another child or leave the cell blank if he is doing nothing. (We may with experience add one or two more codes.) The complete circuit of all children should be completed inaabout two minutes. (This assumes about 5 seconds per child. We may find it necessary to skip a few children in Beryl's class in order to maintain rough comparability with Sandy's class). It may be useful to work out an order of children that takes into account the location of their desks so that you are always going from one child to an adjacent child. An alternative to this approach would be to scan blocks of four to six children sitting next to one another. You would scan the block and then note what each does.

Having completed a set of observations on whole-class attention, you should do as described in Form 1 -- review the notes, make comments, and take a break.

Form 3 Whole Class Teach-Child Interaction: For the time being we will use a simple "running record" to describe interaction in whole-class settings.

Specific instructions:

Tasks - As on Form 1.

Interaction - Simply enter what the teacher does or says. When children are involved, enter each successive speaker one line down. Later, we will code these data as follows:

1. By children:
   a. number performances right or wrong.
   b. Kinds of feedback.
   c. reaction to feedback.
2. By material:
   a. Improvement over performances.

Form 4 Ecological Sample - Whole Room Occasionally, we should spend a day simply recording what goes on in our classroom. The main part of this description will consist of a record of all tasks which occur, either simultaneously or successively, throughout the day, along with details such as who is doing what. In addition to this observational record, a description of the environment, stressing its "literate" aspects shoul be made.[1]

The observer's task will be to categorize tasks along the topic-setting-material line outlined before.[2] Children in each setting will be noted. When a child shifts from one setting or material to another, this

---

1/ We should perhaps keep a weekly record of "literate environment" phenomena.

2/Although precision will not be necessary, non-reading tasks should also be so categorized. e.g. topic-sets; setting - independent; material - SMSG #4.

should be noted. At each shift or change of topic of any sort (teacher or child instigated) the time should be noted.

Although these observations will continue longer than the usual upper limit of one-half hour, the job is relatively easy and so should not be too fatiguing.

Assessment

Our "assessment" program includes all types of data gathering not included under "observations." This means evaluation of classroom worksheets, brief classroom checks on individuals, testing of groups, and testing of individuals. The main functions of this part of the program are:

1. assessment of basic capacities the child brings into the classroom.

2. assessment of learned skills the child brings into the classroom.

3. (most important) assessment of performance during the year:

   a. on specific tasks such as worksheets.

   b. on general reading tests (e.g., taped readings, special worksheets that are, in fact, tests, etc.)

   c. on transfer tests (e.g., reading a passage previously "read" with tape-recorder; working with passages calling for use of correspondences training)

   d. on general writing and composition performance.

The remainder of this chapter will be devoted to a more detailed description of the instruments we have developed or plan to develop, and to their place in our program.

Pre-reading Assessment - Skills Brought In.

Part I - Reading ability: We wish to find out if the child can read, or has certain rudimentary reading skills or knowledge which could be built on. For these purposes we have modified and expanded the Clappy Test developed by R. M. Weber and C. K. Friedrich for Project Literacy. (See test attached) The specific skills tested are:

1. Does he know what written words are? (indicated by counting)

Diagnostic Test

I. Clappy the Clown

Child's name _____

Class _____

Date _____

Observer _____

Naming Colors:

This is Clappy the clown.

1. Can you tell me what colors you see in his face?

_____ _____ _____ _____

2. What are the colors in his balloons?

_____ _____ _____ _____ _____

_____ _____

Now can you tell me how many eyes he has? yes no

4. And how many balloons does he have? _____

5. (Point to the two lines below the picture) How many words are there in this line? Point to the words as you count them.

_____ no. words

_____ points correctly

6. How many words are there in the whole story? (2 lines) _____

7. (Point to the word Clappy) How many letters are there in this word? Point to each letter as you count it.

_____ no. letters

_____ points correctly

Finding Words:

8. You see the balloons have words on them. Can you tell me which balloon says dog?

yes no

9. Clappy is smiling; he is happy. Can you find the word that says happy?

yes no

(if the child has missed both of the above, ask the following)

10. Are there any words on the balloons that you already know how to read?

_____ _____ _____ _____ _____

11. Are there any other words that you know how to read?
(Write down any words he tells you out of order. Later ask if he can read them. If not, take two and ask which one is cat?

_____ _____ _____ _____

Discriminate but not read _____ Can read _____

(If no answer, skip the rest of the questions, and finish by reading the story to the child. If he can read any words at all, continue on)

12. What does Clappy have on his head? (hat)
That's right
Can you find the word that says hat? yes no

13. And what does Clappy have on his feet?
Can you find the word that says shoes? yes no

14. Now look at Clappy's big nose.
Can you find the word that says nose. yes no

15. See how nice and fat Clappy is.
Can you find the word that says fat? yes no

Reading:

16. (Point to the two sentences under the clown)
Can you read these two sentences? yes no

(If no success at all on the above, simply read those lines as well as the story to the child.)

17. (Show the child the story):
Can you read any words in this story? Try it. yes no

19. (If no) Are there any words that you know in this story?

_____ _____ _____ _____ _____

(If the child can't read the story or only some of it, read the rest of the story to the child.)

Remarks:

2. Does he know what letters are? (also indicated by counting)

3. Can he read certain easy words? (dog, happy, etc.)

4. Does he "know" any other words? (Here we distinguish between "reading" and "discriminating." In the latter case, we ask the child which of two or three words is ____.)

5. Can he read a simple story?

6. If so, can he read a more complex story? (Drawn from Chandler Series to be read in class.)

The second test in our reading series is concerned with knowledge of the alphabet. (Test II. Letter Naming, see attached) Prepared by S. Gilmore.

Part II. Writing: During the first week, the children will be asked each day to copy one or two sentences. They will be observed while doing this. If they know how to write or seem naturally to make letters easily, they will not be examined further in this area. If not they will be given the basic motor skills test described later in this paper.

Part III. Language Skills. Much of our program is based on the assumption that the child comes to school with a good command of English grammar, and an ability to recognize semantic nonsense. The language skills tests are intended to check these propositions. The two tests attached are self-explanatory. Both were prepared by S. Gilmore. (Test IV. Syntactic Anomalies; and Test V, Ability to Note and Use Context.)

Pre-reading Assessment - Basic Capacities

Part I. Visual and Auditory Discrimination: Successful reading requires complicated visual perceptual organization and discrimination. Use of spelling-to sound correspondences (phonics) also requires certain auditory discrimination skills.

Individual Diagnostic Tests

II. Letter Naming

Show the child the letter wheel containing lower case letters.

Say, "The monkey on this letter wheel points to a row of letters at a time. Can you tell me how many letters there are in this row." (Have it set up so that the first row (o, s, x, z) is showing.) "Point while you count."

"Can you read any of the letters that the monkey is pointing to?"

(If the child has read nothing yet, point to the first letter and say): "Can you tell me this letter's name? What is this letter?" (Point to the other three letters one at a time, and ask if he can tell what any of them are.)

Go on to the next row of letters. If the child names any one letter, continue on to all the rest of the letters. If he fails to name any, stop after the fourth slit. (After w, v, a, f)

Say: "Now the monkey is pointing to another row of letters. Can you tell me the names of any of the letters here? What are these letters?" (Point to the first and ask separately, then the second, etc.)

Go on to the letter wheel containing capital letters.* Set it so that the first row from which the child knew <u>any</u> lower case letter is showing. Set the lower case wheel at that same row, point to a letter the child knew, and ask him to name it again. Then ask him if he can find that same letter in the capital letter wheel. (Call it a capital letter) Do this for each of the lower case letters the child got right.)

*The two wheels are set up so that the letters in each row are the same, but in different orders.

Diagnostic Test

V. Ability to note and use context.

A. Sentence Completion (should be individual; may come after a class lesson of this type.)

Tell the child: "I'm going to read you some sentences. At the end of each sentence I'm going to leave out a word, and you tell me what word might come next. Try to think of more than one word that might come next. If I say: "I like to play with my _____." you might say "ball" or "cat" or "trains" -- any one of those would be alright. Here are the sentences. (After 1st response observer says: What else could you say? Record 2 responses.)

1. John drew a picture and colored it _____.

_____

2. For lunch I like to eat _____

_____.

3. Mary smiled when she saw the pretty colors on the _____

_____.

4. Tommy's little dog was sleeping on the _____

_____.

5. John looked outthe window and there he saw a _____

_____.

Name of child _____

Class _____

Date _____

Observer _____

Remarks:

Diagnostic Test

V. Ability to note and use context.

B. Silly Sentences (semantic anomalies)

Tell child "I am going to read you some silly sentences and some sentences that are perfectly okey. I would like you to say which of the sentences are silly and which are okay. If a sentence is silly, say silly, and if it is okay, say okay. Suppose I said, "The house ate its lunch early today." You would say that is silly. But if I said "I eat lunch in my house." that would be perfectly okay, so you would say okay.

Here are the sentences:

1. Mary looked out the window and saw the black sun. (silly)

2. A little something is a lot. (silly)

3. The little girl wore a red dress. (ok)

4. On a cold day we feel very hot. (silly)

5. We go swimming in the summer. (ok)

6. The boy looked out his window. (ok)

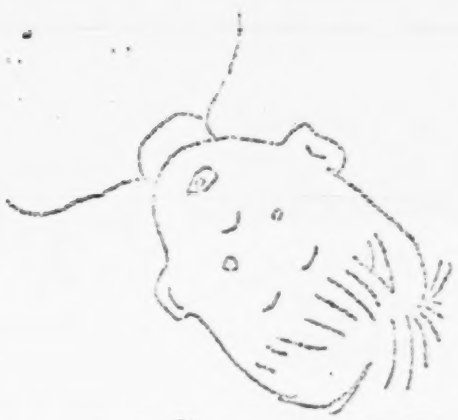
7. Jim's father is eight years old. (silly)

8. My table told me to come out and play. (silly)

9. We plant flowers in our garden. (ok)

*If group administered, can use same answer sheet as syntactic anomalies.

Name _____



silly

ok

m

m

Diagnostic Test (group)

IV. Syntactic Anomalies

This should be given by the observer in groups of no more than 3 or 4 children at a time.

The sentences are on tape. Here is the examiner's introduction.

Do you know what silly means? If I said "Who red hat comes" that would be silly because we don't talk like that. But if I said "Who has a red hat?" that would not be silly because you understand it. Do you know what I mean?

We're going to listen to some sentences on this tape recorder; some will be silly and some will be okay.

(Hand out the answer sheets now)

Look at the boys on top. One is upside-down, and next to him it says silly. Point to where it says silly. (check) The other boy looks right, so next to his picture it says ok. Point to ok. (check)

Now look at the pictures underneath the boys. Point to the two top pictures - two trees - one under the silly boy and one under the ok boy. If the first sentence you hear is silly, make a circle around the tree under the silly upside-down boy. If the first sentence is ok, make a circle around the tree under the ok boy.

For the second sentence we'll look down to the second line - the two flags. We'll put a circle around the flag under the silly upside-down boy if the sentence sounds silly, and under the other boy if the sentence sounds ok.

Let's start now with the first sentence -- look at the two trees and when you hear the sentence circle one of the trees.

(Go very slowly, turning off the tape recorder if necessary. Explain carefully and repeat the explanation as many times as necessary. If the children show no signs of understanding ask them questions about what you've said - e.g., What do you do if the first one is silly. Before each subsequent sentence have them point to the next picture. And since the sentences are taped you can go around and check each child's place after each sentence)

(Try to seat the children so that copying is not facilitated. If anyone copies, tell him you want to know what he thinks of the sentences)

The taped sentences:

1.	He will splash her.	(ok)
2.	They is playing with nets.	(noun-verb #)
3.	The dog has a ball.	(ok)
4.	He is played with a boat.	(verb-aux-tense)
5.	The children has looking at the rabbit.	(verb-aux.-tense)
6.	She is with her dog.	(ok)
7.	They having are dinner.	(word-order)
8.	The children have new toys.	(ok)
9.	The boy talked the girl.	(intrans. verb)
10.	The girl am skipping.	(noun-verb #)
11.	The boy has a red sweater.	(ok)
12.	Them are picking apples.	(pron. case)
13.	Their ball is in the tree.	(ok)
14.	The children are at the beach.	(ok)
15.	The boy runned to the store.	(irreg. past tense)
16.	The boy was hit the girl.	(passive - leaving out by)

Sub-routine Re syntactic anomalies, for those who miss three or more of the anomalous sentences. (If they miss some correct sentences, but get the anomalous ones right, better not to worry. However, if they miss most correct ones or seem to have answered on a chance basis -- this exercise should be used). Don't do this directly after the initial testing - and do it individually.

1. Show the child the colored picture of the zoo on page 43 of "We Learn to listen" (Stern Materials, L. W. Singer)

Ask if he knows what this is a picture of. Accept almost anything reasonable. Ask if they know what kind of an animal that is hanging from the tree. (monkey) Point out the children watching him.

Say: Some of the things the children are saying about the monkey are silly, and some are not. Listen to these things they say and tell me if they are silly.

(silly) "That monkey are hanging from the tree."

(ok) "That monkey is hanging from the tree."

(ok) "The monkey is eating a banana."

(silly) "The monkey Has eating a banana."

If he gets these right: go on to 2.

If he gets these wrong: Tell him to fill in the word where you have stopped. (First read the whole sentence with a pause, then read up to the pause again.)

That monkey ____ hanging from a tree.
The monkey _____ eating a banana.

If fails - make note and stop for now.
If succeed - go on to 2.

2. Say: Can you fix these silly sentences that this boy said so they are not silly anymore? (Point to boy with yoyo watching monkeys)

(tense of aux. verb) These children has looking at a monkey.

(treating indir. obj. as direct) I played the yoyo.

(noun-verb number) That girl am smiling.

(word order) I those like monkeys.

(regularize irregular past tense) I comed to the zoo.

(pronoun case)	Them are little monkeys.
(tense of verb and complement)	He is played with that wagon.

Visual discrimination is covered by Test VI., Letter Matching, prepared by S. Gilmore and Test VII. Word Discrimination, from Continental Press. Test VI, attached, is self-explanatory. Test VII is similar to Test VI, but words are to be matched instead of letters.

If these tests (or other evidence) seems to indicate serious perceptual problems, the Frostig Test of Visual Perception will be given. We will also try to be alert to visual acuity problems, and to arrange for an oculists examination, if necessary.

Auditory discrimination is covered by Test III (attached), prepared by S. Gilmore. Again, if difficulties appear, further testing may be called for.

Part II - Cognitive Capacities: Three tests of cognitive capacities will be given: learning, information processing, and visual memory. In addition, the tests of language skill, especially Test V. Ability to Note and Use Context, also sheds light on cognitive functioning.

The learning and information processing tests have not yet been fully worked out. Brief descriptions of each follow.

The learning test simply involves giving each child a small, standardized reading lesson, with a recall check the following day. Three approaches are used: the full sentence method, the phrase method, and the word method.[1/] The latter two parts each include some of the words in the preceding part. In the sentence and phrase parts of the test, two sentences or phrases are

---

1/ At a later date we hope to give a second 1"learning test" emphasizing spelling-sound correspondences.

Diagnostic Test

VI. Letter Matching (Best to give in 3 or 4 small groups)

Give answer sheets for letter matching (one is attached). Tell the group you are going to show them one letter at a time, and they are going to circle the same letter when they see it on their paper.

Tell the group they are going to start on the left-hand side of the page. Demonstrate left-hand side and see that each child is touching the pictures on the left.

Say they are also going to start at the top. Have each child point to the top left picture (flag).

Say, "The first letter that I show you will be one of the 4 letters next to the flag on the left side of your paper" (Show the first letter). Say, "draw a circle around this letter. Now put your finger down to the next row, on the house. The next letter will be one of the 4 letter next to the house." (show it) Draw a circle around this letter" Continue on.

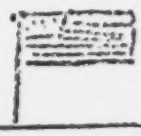
The order of the letters to show is:

o, x, s, c, i, p, t, m, k, z, e, w, r, j, y, f, n, a,

h, v, u, b, d, l, g, q.

Have them write their name if they can.

My Name is_____

h v o m	 q j e b
y x j t	y x v a
s w p q	t k f o
l r n c	l m g n
u i s b	e a f s
d x p f	h r j n
t i o m	w h v b
m f u h	u y n c
h k n r	p f l b
p u z y	o b g d
c m t e	f t l i
v g z w	m g a p
n i r d	q o h d

Individual Diagnostic Test

III. Auditory Discrimination

Say: "I am going to say two words to you. They might be the same word two times, and they might be two different words. If they are the same word, say 'same word' and if they are two different words say 'different words.'

If I say cat - cat, what would you say? That's right, they are the same two words so you would say 'same word.' (Accept 'same' 'same thing' or just about anything that indicates he knows what it is)

If I say grass - car what would you say? That's right they are two different words. If I say day - hay what would you say? That's right, they are also two different words.

Easiest	Medium	Hardest
care - there	tear - bear	boat - vote
S bat - bat	S jim - jim	S post - post
boot - shoot	cat - bat	sue - zoo
bat - hat	sis - this	mill - will
door - four	S cat - cat	bitten - mitten
S coat - coat	share - there	night - light
S drink - drink	build - filled	S queen - queen
do - who	poor - war	few - view
Jill - fill	S light - light	kate - gate
S four - four	S more - more	S rock - rock
S grow - grow	fat - mat	S same - same
jack - hack	jack - knack	fit - sit
pest - nest	S no - no	tear - chair
S high - high	tin - shin	S tear - tear
Jill - sill	tick - hick	pill - chill
gin - thin		

Page

taught, followed by a transfer sentence using material from the preceding sentences. The dependent variables are:

a. How many trials does the child need to learn each part?

b. How many words does he transfer within and between sections?

c. What reduction in trials appears on transfer if it is not immediate?

Two further tests are designed to provide some information relevant to performance on the "learning test", and presumably in learning reading. The "information processing test", not yet completed, will assess the child's ability to process information represented in word-like forms. The test involves sorting counters with words on them. The task is a standard concept formation problem in which the child will need to be able to form "concepts" such as the letters like "ch" occurring together, disregarding the irrelevant information in each word.

Simple, short term memory will be tested with the SMSG short-term memory test. This test may be modified for group administration.

Part III - Motor Skills: Motor skills will not be checked except for children who seem to have serious problems. These will be asked to do several simple drawing tasks: straight line, curved line and trace within a frame.

During the Year Assessments

Frankly, this section has not been much worked out. We hope to learn a great deal from our better dittos, and from the children's writing exercises. These will be adapted to their daily curriculum.

Reading performance will be mainly tested in individual reading sessions with the observer. These sessions will be laid out in several Latin Square design blocks to permit us to distinguish between passage effects and over-time improvements. These will probably be formed by taking three randomly chosen groups of children, and giving the children in each group one of three possible test passages. At the next session, the passages are rotated. By the third sessions all children will have had all passages. (see Fig. 1)

Figure 1 Layout of test reading passages

Group	Week 3	6	9	12	15	18
1	A	C	B	F	D	E
2	B	A	C	E	F	D
3	C	B	A	D	E	F

Capital letters represent test passages

Each test passage will have four parts:

a. very easy (e.g., vocabulary from teacher-composed sentences)

b. medium (e.g., more advanced but still containing all familiar vocuabulary - at least for a fast reader)

c. hard (e.g. some "new words".)

d. recent material - something drawn from the child's reading.

In addition to taping these sessions we may try on-the-spot coding

of the child's performance. The tester will have mimeographed copies of the material being read, and can write in errors and codes describing necessary correction.

Records

Previous experience indicates that a system of files or records needs to be kept to insure reasonably complete coverage of all relevant topics and materials, and all children. [1] At the same time, a good records system should aid in making sure each child covers all topics he is capable of doing. Finally, and most important, by watching progress in the various topics, and related problems of attention and ability, we should provide ourselves with feedback concerning the effectiveness of the curriculum.

The records to be kept are organized along two main lines: by child and by topic. The topic records will consist of the following:

a. Daily record sheets (Form A - Curriculum Summary) to be kept on each topic taught each day. Samples of worksheets and other relevant materials should be attached. A file of these record sheets should obviously be made.

b. Summaries of tabulated worksheet and test results. These too should ultimately be appended to daily records.

c. Weekly topic summary - will review materials presented and summarize results in terms of performance and attention. Some effort will be made to consider signs of integration and aid to reading in general.

d. Weekly curriculum plan - on the basis of consultation with the teachers in the light of results and intuition, the teachers and JR will draw up a weekly curriculum plan, noting what topics they hope to work on each day during the coming week.

e. Observer's Schedule (Form B) Using the weekly curriculum plan, the teacher and observer can work out (on a day-by-day basis) the observer's schedule. It is necessary that this be done at least the day before the observations are to be carried out so that the observer can familiarize herself with the materials being used, and can provide herself with the correct observation forms.

The child records will consist of:

1/ Of course, time pressures may result in decisions not to gather data on certain subjects. It is preferable, however, to be able to decide what to drop!

Form B Class _____ OBSERVER'S SCHEDULE Observer _____

Week of _____

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9:00					
10:00					
Recess					
11:00					
Lunch					
1:00					

Form A

CURRICULUM SUMMARY

Topic _____ Date _____ Classroom _____ Observer _____

Content Introduced	Setting and Material	Data Gathered
Content Reviewed:		

The child records will consist of:

Weekly child summary (Form C) This summary should note material covered, and what performance and observation data were gathered. Tests should also be noted. Work-sheets, test results, etc. should be appended. A file for each child is needed.

Form C

WEEKLY CHILD SUMMARY

Child _____

Observer _____

Week _____

Topic	Monday	Tuesday	Wednesday	Thursday	Friday	Comments
Read.						
T-C sent.						
Coding						